## Dichlorosilane

**SiH₂Cl₂**

### Grade | Semicon 2N | ULSI Plus 3N
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**Purity, %** | 99.0(w) | 99.9(w)**
**Oxygen + Argon** | ≤1.0 ppmv |
**Nitrogen** | ≤1.0 ppmv |
**Carbon Dioxide** | ≤1.0 ppmv |
**Carbon Monoxide** | ≤1.0 ppmv |
**Methane** | ≤1.0 ppmv |
**Hydrocarbons (C₂-C₄)** | ≤1.0 ppmv |
**Hydrogen Chloride** | ≤500 ppmw |
**Monochlorosilane** | ≤0.3% w | ≤250 ppmw
**Other Chlorosilanes** | ≤1% w |
**Trichlorosilane** | ≤500 ppmw |
**Silicon Tetrachloride** | ≤200 ppmw |
**Resistivity, N-type, ohm-cm** | > 200 | > 400
**Individual Metals – Al** | ≤1.0 ppbw | ≤50 ppta
**As** | ≤0.2 ppbw | ≤50 ppta
**B** | ≤0.1 ppbw | ≤300 ppta
**P** | ≤0.3 ppbw | ≤300 ppta
**C** | ≤1,000 ppbw | ≤300 ppba
**Fe** | ≤50 ppbw | ≤2 ppbw
**Ga** | ≤10 ppta | Mn ≤0.2 ppbw
**Sb** | ≤10 ppta | Mo ≤0.2 ppbw
**In** | ≤10 ppta | Ni ≤0.2 ppbw
**Cr** | ≤0.2 ppbw | Na ≤0.2 ppbw
**Cu** | ≤0.2 ppbw | Zn ≤0.2 ppbw
**O** | ≤200 ppba |

### Additional Metals:

- Total deposited metals
- **Total Purity excluding HCl**
- A lot analysis is provided for each order.
- Individual analysis is also available upon request.
- Pneumatic valves and JIS connections are available upon request.

### CYLINDER

| Internal Volume | Liters | 43.8 |
| Content | kg | 43.1 |
| Change Point*** | lbs | 93 |

### TECHNICAL DATA

| Cylinder Pressure @NTP | 8.6 psig |
| Specific Volume @NTP | 0.24 m³/kg |
| CAS No | 4109-96-0 |
| CGA/DISS/JIS | 678/636/W22-14L |
| Molecular Weight | 101.01 g/mol |

### UN Number

- UN 2189

### DOT Shipping Name

- Dichlorosilane

### DOT Classification

- 2.3 (Poison Gas)

### DOT Label

- POISON GAS, FLAMMABLE GAS

### ECCN #

- EAR99

### Harmonized #

- 2827.39.9050

### Vapor Pressure

| Temp, °C | 0.0 | 15.5 | 21.0 | 32.2 | 43.3 |
| Press, psig | -4.1 | 4.3 | 8.6 | 18.1 | 30.8 |
| Temp, °F | 32 | 60 | 70 | 90 | 110 |

### RFO Data

| Size, mm | 0.254 | 0.3556 | 0.508 | 0.762 | 1.016 |
| Size, inches | 0.010 | 0.014 | 0.020 | 0.030 | 0.040 |
| Flow, scm | 553 | 1056 | 2178 | 4860 | 8379 |
| Flow, scf/h | 1.2 | 2.2 | 4.6 | 10 | 18 |

### Cylinder

<table>
<thead>
<tr>
<th>Cylinder</th>
<th>Treatment</th>
<th>Nominal Diameter (OD)xHeight*</th>
</tr>
</thead>
<tbody>
<tr>
<td>QF</td>
<td>ULTRA-LINE®</td>
<td>23x130/134/143 cm x 9x51/52.5/56 inches</td>
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</tbody>
</table>

**UN = 21°C or 70°F and 101.3 kPa or 1 atm**

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**http://www.mathesongas.com/edge/**

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